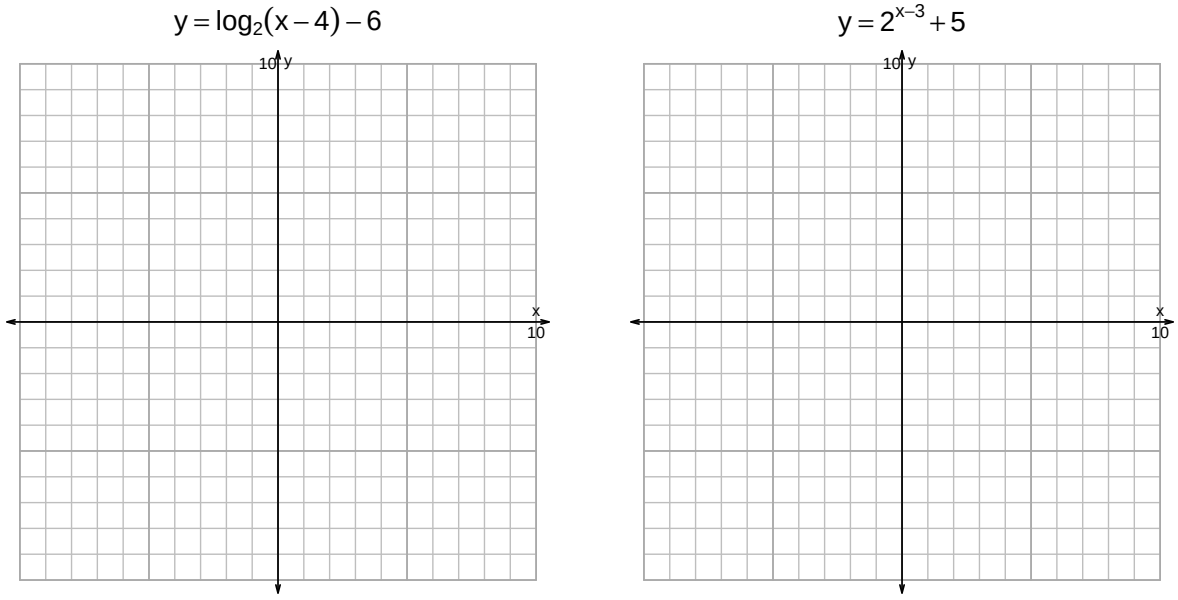
Name: Date:

s18quiz: EXP LOG (Practice v104)

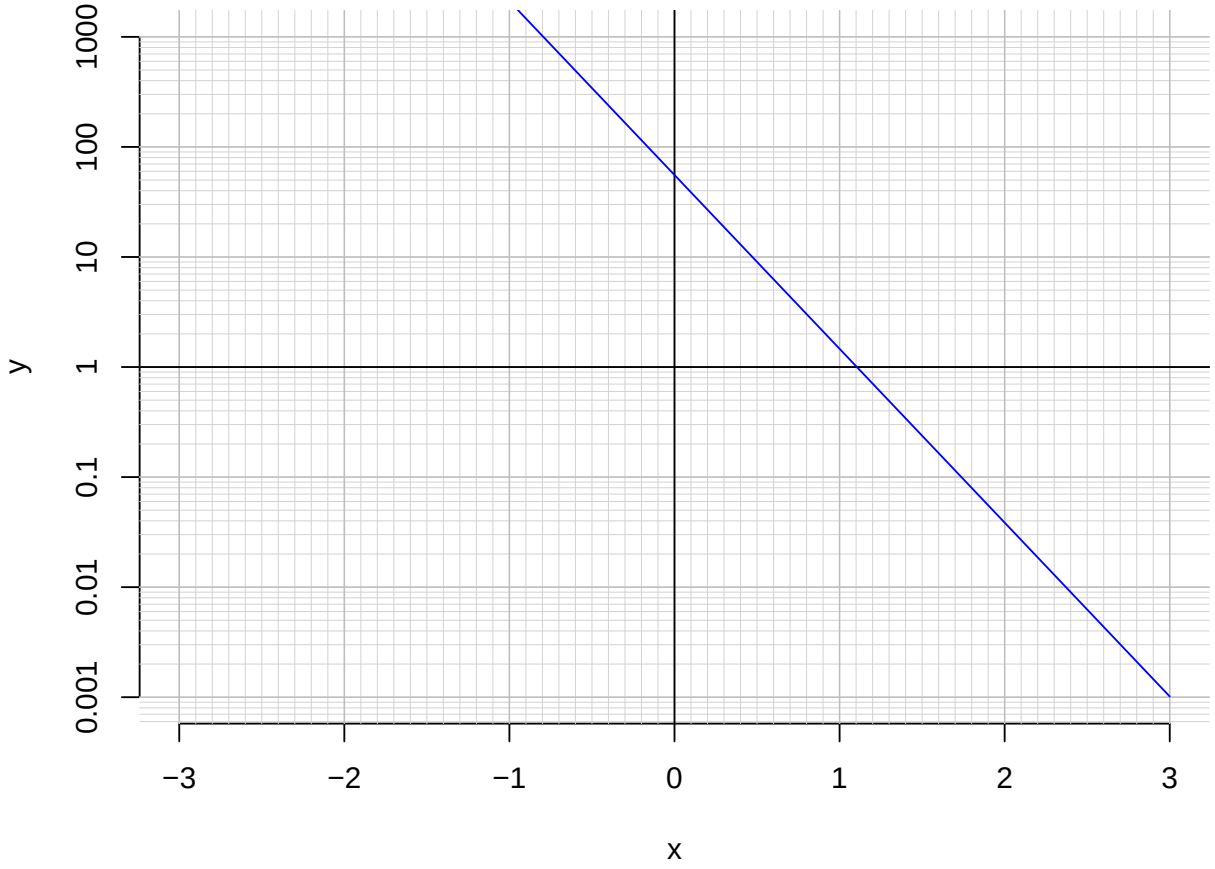
1. Graph $y = \log_2(x-4) - 6$ and $y = 2^{x-3} + 5$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-4}{7}\right) \cdot 2^{-3t/5}$$

3. An exponential function $f(x) = 55.6 \cdot e^{-3.64x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(2.4)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(80)$.